

8. ON THE PHENOMENON OF NOCTURNAL FLIGHTS OF SOME RESIDENT BIRDS AT LUNGLEI, MIZORAM, N. E. INDIA

During a faunistic survey of Mizoram in 1976, our attention was drawn to a report of frequent casualties of birds occurring annually, by dashing to death against walls of a building at Lunglei, Lunglei district, Mizoram. We visited the building in November, 1976 with a view to study the phenomenon, but were told that the birds fly in only during the months of September and October. However, the owner of the building, Dr. Doliana, a retired Civil Surgeon at his Aizwal residence furnished valuable information in addition to presenting some specimens of parts of birds which he had preserved out of those killed during the accidents. We also obtained some of the feathers of the dead birds for identification from the building where the feathers are kept as wall-decoration.

The building stands at a height of 1210 m amidst rugged mountain ridges. It has three prominent electric lights fitted on the same plane in front of the building. As the bulbs are of high intensity, of more than 100 watt power, they are easily seen at night even from far off distances. The birds are attracted by the lights and dash themselves headlong against the roof and walls of the building and thus get killed. The following additional information has been obtained from Dr. Doliana:

1. The birds have been observed to dash against the building in late September and early October during which period the area receives late monsoon rains.
2. The phenomenon occurs when the sky remains over-cast with clouds, i.e. without moonlight and with fog and mist. A little drizzle appears favourable.
3. The birds usually fly from west to east

during 7 p.m. to 10 p.m.

The above three points are extremely similar to those reported by Sálím Ali (1962) for Haflong except that at Haflong the birds came from the north. The number of birds which get killed annually reportedly vary from 300 to 500. Dr. Doliana has made record of such deaths since 1974, and the apparent number of species vary from 6 to 8.

The following identification is based on parts of specimens obtained from Dr. Doliana and from the building.

1. Indian Moorhen: *Gallinula chloropus indica* Blyth.
2. Greyfronted Green pigeon: *Treron pompadora*.
3. Indian Emerald Dove: *Chalcophaps indica*. Sálím Ali (1962) mentions frequent casualties of this bird and the green pigeon in the coffee plantations of Mysore and Kerala.
4. Indian Threetoed Forest Kingfisher: *Ceyx erithacus*.
5. Indian Ruddy kingfisher: *Halcyon coromanda coromanda* (Latham). There are several records of this species getting killed under similar circumstances in other places. Robinson & Chasen (1927) observed nocturnal fall of this bird at light houses and light strips in the straits of Malacca in autumn. Sálím Ali (1962) mentions this species being regularly picked at lights on certain mountain ridges of Jatinga (Haflong) in North Cachar Hills in Assam in dark monsoon nights.
6. Hooded Pitta: *Pitta sordida cucullata* Hartlaub.
7. Drongo Cuckoo: *Surniculus lugubris*
8. Cuckoo: *Cuculus canorus*

It is clear from the above list that all the birds killed are of *resident species*. Sálím Ali (1962) and Gee (1964) have recorded similar phenomenon in Jatinga near Haflong, where petromax lamps are used by the villagers to attract birds. In both the places two common observations are made: that (i) almost all the species are resident birds; and (ii) green pigeons (*Treron* sp.) in considerable numbers are reported to be attracted by light. Although some of these birds namely, Emerald Dove, Greyfronted Green pigeon, Three-toed Forest kingfisher and Indian Ruddy kingfisher are known to dash against ob-

stacles and die, it is not still clearly understood why these 'non migratory' birds fly into the lights and that too in one particular time of the year and in a particular place or two alone.

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* Not seen by the authors.

9. NOTES ON DISTRIBUTION, SEXUAL DIMORPHISM AND GROWTH IN CAPTIVITY OF *GEOCHELONE ELONGATA* (BLYTH)

(With a text-figure)

Distribution: This species is so far known to occur in India from Jalpaiguri district, E. Bengal and Singbhum district, Bihar (Chaibassa and Chotanagpur) as recorded in the collection of Zoological Survey of India excluding the female specimen from Orissa mentioned below. Outside India the species occurs

in Nepal, Bangladesh (Akyab and Chittagong Hill tracts), Burma, Thailand. According to Smith (1931)¹ Nepal is the north eastern limit of the range of the species in the Indian

¹ Smith, M. A. (1931): The Fauna of British India. Vol. I.